

Zambia from December to May (R. J. Dowsett), but previously, the only indications of breeding dates for *N. bannermani* have been birds with active gonads in March and September (Benson *et al.* 1971). Descriptions of the nests and eggs for the other 3 species are to be found in Mackworth-Praed & Grant (1973). Nests of *N. verticalis* found by Sir Frederick Jackson and G. L. Bates are more fully described in Bannerman (1948) where, not surprisingly, they differ little from the present record. The 2 montane forest species, on the other hand, *N. oritis* and *N. alinae*, use moss (with other materials) in the construction of their nests (Mackworth-Praed & Grant 1973), a feature which is lacking in those built by *N. verticalis* and *N. bannermani*.

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Report on the birds collected during the Armour-*Utowana* West Indian Expeditions

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During the early 1930s, the Museum of Comparative Zoology, Harvard University (MCZ) acquired specimens (chiefly molluscs, reptiles and birds) collected in the West Indies during cruises of the research yacht *Utowana*. Thomas Barbour, then Director of the MCZ, was present on some of the cruises as a guest of the ship's owner Allison V. Armour. Barbour (1945) remarked that more than 22 published reports had been based on collections from *Utowana* expeditions.

Ornithological material from these voyages includes fossils obtained by Froelich Rainey in the Bahamas for Yale University. These have been reviewed by Wetmore (1938) and by Olson & Hilgartner (1982). No study skins from the *Utowana* expeditions are among specimens of Bahaman birds at the Yale Peabody Museum, and there is no record indicating that any accompanied the Rainey material (E. Stickney). However, 221 study skins taken in 1933 and 1934 largely by James C. Greenway, Jr. were deposited in the MCZ. One *Calliphlox evelynae lyrura* and 2 *Mimus*

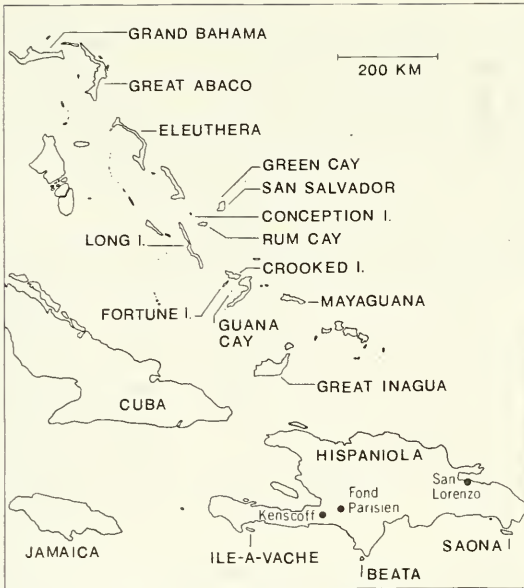


Figure 1. Map showing islands in the Bahamas and the Hispaniolan region mentioned in the text.

gundlachii gundlachii subsequently were sent to the Paris Museum. The 169 Bahaman-Hispaniolan specimens, which, for the most part, have not been reported on previously are the main subject of the present study. Collecting localities are shown in Fig. 1.

The 134 specimens collected in 1933 by J. C. Greenway, Jr (MCZ 157689–822) include 66 (16 species) taken in the Bahamas (17–26 February) on San Salvador, Crooked I., Fortune I. (=Long Key), Mayaguana and Great Inagua, along with 16 (6 species) from Haiti at Kenscoff (1 March) and near Fond Parisien (3 March) and 52 (10 species) from the Colombian islands Providencia (=Old Providence) and San Andrés (=St Andrews). Greenway (1933) described *Dendroica petechia armouri* from specimens collected on Providencia. Bond & Meyer de Schauensee (1944), reviewing the avifauna of both Providencia and San Andrés, reported briefly on all of Greenway's material from these 2 islands, relying apparently on data furnished by James L. Peters.

Among the 87 specimens collected in 1934, 57 representing 23 species were taken in the Bahamas (7 February–28 March) on Grand Bahama, Great Abaco (written Abaco I. on labels and in the catalogue), Eleuthera, Long I., Conception I., San Salvador (=Watlings I.), Green Cay (north of San Salvador), Rum Cay, Crooked I., Guana Cay (in the Bight of Acklins), and on Great Inagua. The 30 others (18 species collected 6–12 April) are from Hispaniola (San Lorenzo at Samaná Bay) and the satellite islands Saona, Beata and Ile-à-Vache. MCZ catalogue numbers for this collection are 160921–964 (specimens from the Hispaniola and satellite

islands, from Grand Bahama on 23 March, and from Green Cay), 269642 (*Pandion haliaetus* from Long I.) and 331727 (*Loxigilla violacea* from Eleuthera). Barbour & Shreve (1935) give an itinerary of this cruise. The Bahaman birds were collected by J. C. Greenway Jr, and Helen Greenway and Thomas Barbour. The Greenways were not present on the Hispaniolan leg of the 1934 voyage and no specific collector is named for those specimens, the museum labels and catalogue bearing the notations "Utowana Exp. 1934" and "skinned by MCZ staff".

The names and sequences of species in this account follow the American Ornithologists' Union (1983) Check-list. Museums and collections are abbreviated as follows: AS = Albert Schwartz Collection (now at LSUMZ); FMNH = Field Museum of Natural History, Chicago; LSUMZ = Louisiana State University Museum of Zoology; UMRC = University of Miami Reference Collection; USNM = National Museum of Natural History, Washington. Many of the museum labels on the *Utowana* specimens have information on reproductive condition and these data are available from the author on request. Locality records for specimens collected in the Bahamas are summarized in Table 1 and those from Hispaniola and its satellite islands are in Table 2. The more noteworthy records are discussed in greater detail below.

AUDUBON'S SHEARWATER *Puffinus lherminieri*

A male collected on Green Cay in March (presumably when the *Utowana* was at San Salvador on 27 and 28 March) is the first record for the island. Olson *et al.* (in press) report fossils of this species from San Salvador. The species is known to breed on small cays widely in the Bahamas (Brudenell-Bruce 1975, Buden 1987a,b), though no breeding sites have been reported for either Green Cay or San Salvador (see Sprunt 1984).

WEST INDIAN WHISTLING-DUCK *Dendrocygna arborea*

One downy-young, ♀, (total length of skin 215 mm from tip of bill to rump) collected in March on the 1934 expedition is the only record for Crooked Island. The *Utowana* was in the Crooked-Acklins area 1-6 March.

OSPREY *Pandion haliaetus*

All the specimens are examples of the resident subspecies *P. h. ridgwayi* (Maynard). One ♀ collected on Long Island (the back of the museum label reads "E. Booby Cay"), 23 February 1934, was on a nest containing one egg. One ♂ taken on Mayaguana 24 February and another on 25 February 1933 are the first records for that island. A ♂ was collected on Crooked Island on 20 February and another on 21 February 1933, the only earlier record being a bone fragment reported on by Wetmore (1938).

AMERICAN KESTREL *Falco sparverius*

One labelled "[♂]" was collected on Saona on 8 April 1934. The breast is white throughout in this specimen (MCZ 166706), thus resembling that of pale-phase *F. s. sparveroides* Vigors from Cuba more closely than that of *F. s. dominicensis* Gmelin from Hispaniola. In 10 MCZ pale-phase

TABLE 1

Birds collected in the Bahamas on the Utowana expeditions. Numerals indicate numbers of specimens; an asterisk (*) indicates specimens collected in 1933, all others are 1934. Islands are listed in geographic sequence, roughly northwest to southeast and abbreviated as follows: GB=Grand Bahama, GA=Great Abaco, EL=Eleuthera, LG=Long island, CN=Conception Island, RM=Rum Cay, SS=San Salvador (including also the satellite islet Green Cay for one record of *Puffinus lherminieri*), CR=Crooked Island (including also the satellite islet Guana Cay for one record of *Zenaida aurita*), FO=Fortune Island, MA=Mayaguana, GI=Great Inagua

Species	Locality										
	GB	GA	EL	LG	CN	RM	SS	CR	FO	MA	GI
<i>Tachybaptus dominicus</i>							1				
<i>Puffinus lherminieri</i>							1 ^a				
<i>Dendrocygna arborea</i>								1			
<i>Pandion haliaetus</i>				1				2*	1*	2*	
<i>Rallus longirostris</i>							1				
<i>Haematopus palliatus</i>											3*
<i>Zenaida aurita</i>	1					1	1	1 ^b			
<i>Tyto alba</i>								1*			
<i>Athene cunicularia</i>			1								
<i>Chlorostilbon ricordii</i>	1	1									
<i>Calliphlox evelynae</i>			4	2				7*	1*		5*/2
<i>Melanerpes superciliosus</i>	3						6*				
<i>Picoides villosus</i>	4										
<i>Contopus caribaeus</i>	1										
<i>Tachycineta cyaneoviridis</i>		4									
<i>Poliophtila caerulea</i>										2*	1*
<i>Mimus polyglottos</i>		1		2							1*
<i>Mimus gundlachii</i>			2		1		4*	1*		3*	
<i>Margarops fuscatus</i>						1	2*				
<i>Vireo crassirostris</i>			4								1*
<i>Dendroica petechia</i>					2		3*			1*	
<i>Geothlypis trichas</i>							2*				
<i>Geothlypis rostrata</i>			1								
<i>Coereba flaveola</i>			3	1			2*	2*	1*		
<i>Spindalis zena</i>										1*	
<i>Tiaris bicolor</i>	1		3					1*	1*	1*	4*
<i>Loxigilla violacea</i>			1								3*

^aGreen Cay, a tiny islet about 2 km off the northwestern coast of San Salvador.

^bGuana Cay, a tiny islet in the Bight of Acklins, on the Crooked-Acklins Bank and south of Crooked Island.

♂♂ from Cuba, the breast is completely white or has one or more small patches of buff colour, whereas all 8 MCZ ♂♂ from Hispaniola have some buff colour on the breast, and this usually richer and more extensive than in those from Cuba. A dark (=rufous) morph is common in Cuba, but all specimens reported from Hispaniola are pale-phase, though Bond (1980) remarked that "a rufous morph has been observed once or twice in Haiti and Jamaica". The specimen from Saona is slightly paler on the dorsum (more yellowish-brown, less reddish-brown) than are most of the Cuban and Hispaniolan specimens.

The Saona specimen wing measures 181.0 mm, the tail 112.4 mm. For the 10 ♂♂ from Cuba, the mean ± 1 SD wing length is 179.3 ± 3.8 (176.0–187.0), and mean tail length is 113.6 ± 2.8 (109.8–118.0) mm; the 8 ♂♂

TABLE 2

Birds collected on Hispaniola and satellite islands on the *Utowana* expeditions. Numerals indicate numbers of specimens; an asterisk (*) indicates specimens collected in 1933, all others are 1934. F = near Fond Parisien, K = Kenscoff, L = San Lorenzo at Samaná Bay.

Species	Hispaniola	Locality		
		Saona	Beata	Ile-à-Vache
<i>Falco sparverius</i>		1		
<i>Sterna maxima</i>			2	
<i>Zenaida aurita</i>			3	
<i>Columbina passerina</i>			1	
<i>Coccyzus minor</i>			1	
<i>Crotophaga ani</i>		2		
<i>Anthracothorax dominicus</i>	1*K			
<i>Todus subulatus</i>	2 S			
<i>Melanerpes striatus</i>	6*F			
<i>Myiarchus stolidus</i>		3		
<i>Tyrannus dominicensis</i>		2	3	
<i>Corvus palmarum</i>	5*K			
<i>Mimus polyglottos</i>		2		
<i>Margarops fuscatus</i>			1	
<i>Setophaga ruticilla</i>	2*K			
<i>Coereba flaveola</i>	1*K			1
<i>Microligea palustris</i>	1 S			
<i>Phoenicophilus palmarum</i>	1 S			
<i>Tiaris olivacea</i>	1*K			
<i>Quiscalus niger</i>			1	
<i>Icterus dominicensis</i>		1		

from Hispaniola measure 184.9 ± 4.2 (180.0–192.0) and 118.7 ± 2.4 (115.1–122.6) mm, respectively.

Mensurally and chromatically, the specimen from Saona is closer to *sparveroides* than to *dominicensis*; however, as it is near or at the extremes in variation of Hispaniolan *dominicensis* in both size and coloration, and in view of the close proximity of Saona to Hispaniola and the much greater distance to any known population of *sparveroides*, I believe this specimen is better treated as a variant of *dominicensis* than as a vagrant of *sparveroides*.

BARN-OWL *Tyto alba*

A ♀ collected on Crooked Island, 20 February 1933, almost certainly is the specimen in the photograph selected as a frontispiece by Barbour (1943). I know of no other firsthand report of *T. alba* from Crooked, except that I collected one there (LSUMZ 71160, sex unknown) on 8 April 1972.

Bond (1956) included all the Bahaman populations of Barn-Owl under the name *Tyto alba lucayana* Riley. According to Ridgway (1914), *lucayana* differs from *T. a. pratincola* (from eastern, continental North America) in having more ochraceous buff and less distinctive white specks on the dorsum, smaller dusky spots on inner webs of outermost primaries, and larger feet. But these are at best slight and average differences if evident at all. I found no appreciable differences in size of feet

between Bahaman and continental samples, neither visually nor in the measurement length of hind claw. In my samples, Bahaman birds averaged slightly smaller than the supposedly larger continental birds—4 ♂♂ and 4 ♀♀ from the Bahamas, 19.7 and 20.4 mm, respectively; 7 ♂♂ and 5 ♀♀ from North Carolina, Louisiana, Alabama, and Florida (all LSUMZ and MCZ), 20.2 and 21.1 mm, respectively.

The Bahaman birds tend to be paler (on tail, wings, dorsum and border of facial disc), on the average, than do those from the continent. But among 8 ♂♂, 6 ♀♀ and 5 unsexed specimens from Florida (4 MCZ, 15 UMRC), at least 4 ♂♂ and one ♀ match extremely well 4 ♂♂, 4 ♀♀ and 2 unsexed specimens from the Bahamas (3 AS, 1 FMNH, 2 LSUMZ, 2 MCZ, 2 USNM). Two ♂♂ from Louisiana (LSUMZ 2404, 32233) are paler even than most of the specimens from the Bahamas. Also, Bangs (1900) reported that in a letter pertaining to the identification of 2 Barn-Owls taken on New Providence in 1897, Ridgway wrote "We can match your two Bahama specimens exactly with some in our [USNM] series from Washington, Arizona, etc.; we also have a Bahama skin very much resembling yours".

In the absence of any demonstrable mensural differences between the Bahaman and continental birds, and as the differences in coloration are slight and are not constant, I recommend merging *T. a. lucayana* Riley with *T. a. pratincola* (Bonaparte).

WEST-INDIAN RED-BELLIED WOODPECKER *Melanerpes superciliaris*

3 ♂♂ of *M. s. bahamensis* (Cory) were collected on Grand Bahama, 23 March 1934. Short (1982) claimed *M. s. nyeanus* (Ridgway) from San Salvador "are a trifle longer billed and a bit paler below, averaging less black on the head of the males but otherwise seem identical with Grand Bahama specimens, and the latter do not merit separate status nomenclaturally (as 'bahamensis')". But among *M. superciliaris* in the MCZ collection, those I examined from San Salvador (3 ♂♂, 2 ♂♂?, 2 ♀♀) have more and brighter yellow on the venter, more white (less grey) on the head, and brighter red nasal tufts than do those from Grand Bahama (7 ♂♂, 1 ♂?, 4 ♀♀), and are eminently distinct from the Grand Bahama birds.

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Avian body weights from the lower Rio Xingu, Brazil

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From 13 August to 30 September 1986, we surveyed the avifauna of the east bank of the lower Rio Xingu ($3^{\circ}39'S$, $52^{\circ}22'W$) from an encampment 52 km SSW of Altamira, Pará, Brazil, as part of a biological survey of the region sponsored by the Academia Brasileira de Ciências. The purpose of this paper is to present data on the body weights of birds sampled from populations at this locality. Some data of this type from eastern Amazonia are scattered among recent publications (e.g. Oren 1987), but most of these deal only with selected species. None of the older works on birds of the lower Rio Xingu mentions body weights (Snethlage 1913, Griscom & Greenway 1941).

Three major terrestrial habitats occur naturally along the lower Rio Xingu: (1) *seasonally flooded forest*; (2) *terra firme forest*; (3) *successional island scrub*. A fourth habitat type, agricultural clearing and man-caused secondary growth, was restricted to small scattered patches near the river